

Remarks

Applicants respectfully request reconsideration of this application as amended herein.

Applicants confirm the oral election made by their attorney on Dec. 12, 2002 of Group I for prosecution in this application. This election is made without traverse. Non-elected claims 2-4 have been canceled in this amendment.

Claims 1 and 5-6 were rejected under 35 USC 112 as indefinite because of insufficient antecedent basis for the limitation "the other fiber". Claims 1 and 5 have been amended to improve the antecedent clarity.

Claims 1 and 5-7 have been rejected under 35 USC 102(e) as anticipated by Kimura. The Examiner asserts that Kimura discloses the claimed limitation in the rejected claims that the two fiber types are distributed randomly amongst each other. Applicants find no disclosure of this feature in the paragraph cited by the Examiner. In fact, Kimura is entirely silent on the problem that Applicants have identified and solved. Kimura is just as likely to encounter the unintended injurious radial alignment of fiber types as Applicants identified in their application as Applicants encountered, analyzed and solved. There is no disclosure in Kimura whatsoever of the problem or its solution that Applicants identified and solved. Accordingly, Applicants believe that claims 1 and 5-7 are patentable over Kimura, and respectfully solicit the Examiner's allowance of these claims over Kimura.

Re claims 1 and 7, the Examiner asserts that "the method of forming the device is not germane to the issue of patentability of the device itself." The Examiner is referring to the limitation "wound in an annulus on a mandrel" as a method limitation. Applicants assert that this is not a "method of forming" any more than any other common structural limitation. It merely explains the structure of the device. Applicants should not be limited in describing their invention by artificial barriers between structure and process. There is no ambiguity or lack of clarity in these claims and Applicants should be permitted to claim the invention as they see fit if the invention satisfies the requirements of the Patent Law. The Examiner has not cited any provision of the Patent Law that

allows the PTO to ignore limitations inserted by Applicants that distinguish their invention over the prior art.

Re. claim 5, Kimura does not disclose a process that will ensure that its fibers will be distributed randomly amongst each other and not become aligned radially in the undesirable condition identified and solved by Applicants.

Re. claim 6, the Examiner asserts that the limitations

$$W_L = (N + B/A) \cdot L_R$$

$$W_L + L_R < L_m$$

N : Maximum integer obtained when W_L is divided by L_R

A : integer larger than B

B : integer smaller than A

$B/A \neq 1, 1/2, 1/3, 1/4$

W_L : Winding Length (inch)

L_R : Lead Rate (inch)

L_m : Distance between inner faces of two mandrel flanges (inch)

$$m \cdot L_R = n \cdot Sp$$

m : integer ≥ 2

n : integer ≥ 2

Sp : fiber space amongst other fiber (inch)

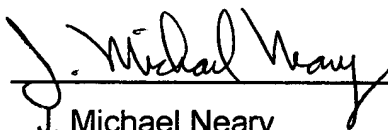
are obvious because it would have been within the "general skill of a worker in the art to achieve optimization through routine experimentation." Applicant respectfully requests clarification, and specifically how the Examiner thinks that these limitations are within the general skill of a worker in the art "to achieve optimization through routine experimentation." Applicant respectfully requests that the Examiner cite a reference to show that this subject matter, in this combination, is within the general skill of a worker in the art.

Claim 7 calls for "macroscopically uniform distribution in each zone by controlling the correlation between lead rate of the fiber band as it is wound onto the mandrel per mandrel revolution and the winding length." Kimura does not disclose this structure or the problem of unintentionally failing to achieve it and the solution to ensure that the problem does not occur. Applicants have discovered the problem and have identified its

cause and have solved it in a way to avoid it reliably. Claim 7 claims the structure by defining, in part, how the structure is arranged during its creation. There is nothing in the Patent Law that forbids Applicants from claiming their invention in this way. If the Examiner believes that this claim is unpatentable because the limitations in the claim must be ignored because they recite process distinctions, Applicant respectfully requests that a citation of the applicable provisions of the Patent Law be cited which specify that Applicants are not allowed to defined structure in terms of process limitations.

Applicants believe that the claims now pending in this application are patentable for the reasons set forth above and solicits the Examiner's reconsideration of these claims in light of these reasons. If the Examiner, in his independent judgement, concurs with Applicant's opinion, he is respectfully requested to pass this application to issue.

Respectfully submitted,

A handwritten signature in black ink, reading "J. Michael Neary", written over a horizontal line.

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